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ABSTRACT

A method and apparatus for representing double stranded nucleic acid fragments which have been separated by a chromatographic process as an array of bands which can be accurately quantified, optimized and stored. Using, for example, a Matched Ion Polynucleotide Chromatography (MIPC) process, an analog output from a UV detector is digitized and input to a computer. The digitized signal is converted to a linear array of bands which may be displayed on a video display terminal. The intensity and/or color of a band may correlate to the amount of double stranded nucleic acid in the respective fraction or the respective double stranded nucleic acid fragment above a user selected threshold level at a corresponding point in the digitized signal. The calculated base pair length, concentration, and retention time of each band in the array of bands may be displayed in alphanumeric form.